IMAGINING the possibilities. MAKING THEM HAPPEN.

Indiana Department of Education

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3-5 Mathematics Resources to Extend and Enrich the Core Curriculum Appropriate for High Ability Students
Indiana Academic Standard Strand:
Data Analysis (DA) and Data Analysis and Statistics (DS)

Resource	Annotation	Differentiation Tip(s)	Correlating Indiana Academic Strand Standards	Correlating Indiana Academic Process Standards
DynaMath. dynamath.scholastic.com	*DynaMath* is a monthly magazine that provides upper-elementary students with challenging and engaging real-world math applications to extend and enrich the core curriculum.	***Flexible Grouping:*** Assign like-ability partners or small groups to collaboratively explore and work through the magazine activities.	* varies with monthly issues	* varies with monthly issues
Gavin, M.K. et al. (2007) ***(Project M3: Mentoring Mathematical Minds) Analyze This! Representing and***	In this supplemental unit, students learn about categorical data and how to represent it using Venn diagrams and pie graphs. They also learn about continuous	***Tiered Delivery:*** Utilize the unit's Hint Cards and Think Beyond Cards.	3.DA.1; 3.DA.2 4.DA.1; 4.DA.2;	PS.1; PS.2; PS.3; PS.4; PS.5; PS.6; PS.7; PS.8

Interpreting Data. Dubuque, IA: Kendall/Hunt Publishing Co. (ISBN: 0-7575-3292-6)	data as they construct and analyze line graphs. A Teacher Guide, Student Mathematician's Journal, Hint Cards, and Think Beyond Cards are available. The unit is intended for fourth grade and takes approximately 31 50-minute sessions, or approximately 6 weeks, to complete. Hint Cards support students who need more practice or additional instruction with skills or concepts, and Think Beyond Cards challenge students who have demonstrated mastery and are ready for an increased challenge.		4.DA.3 5.DS.1	
Gavin, M.K. et al. (2006) ***(Project M3: Mentoring Mathematical Minds) Digging for Data: The Search Within Research.*** Dubuque, IA: Kendall/Hunt Publishing Co. (ISBN: 0-7575-2335-8)	In this supplemental unit, students take on the role of research scientist and become active mathematicians as they learn how to gather, represent, and analyze data. Students learn about line plots, bar graphs, double bar graphs, mean, median, and mode. A Teacher Guide, Student Mathematician's Journal, Hint Cards, and Think Beyond Cards are available. The unit is	***Tiered Delivery:*** Utilize the unit's Hint Cards and Think Beyond Cards.	3.DA.1; *3.DA.2 * data generated is not specifically measured lengths with rulers 4.DA.1;	PS.1; PS.2; PS.3; PS.4; PS.5; PS.6; PS.7; PS.8

	intended for third grade and takes approximately 36 50-minute sessions, or approximately 7 weeks, to complete. Hint Cards support students who need more practice or additional instruction with skills or concepts, and Think Beyond Cards challenge students who have demonstrated mastery and are ready for an increased challenge.		*4.DA.2 *whole number line plots 5.DS.1; 5.DS.2	
Gavin, M.K. et al. (2008) ***(Project M3: Mentoring Mathematical Minds) What Are Your Chances?*** Dubuque, IA: Kendall/Hunt Publishing Co. (ISBN: 978-0-7575-4197-1)	In this supplemental unit, students explore probability and the mathematics behind it. They conduct experiments, gather data, and analyze results. For the culminating project, students create a game to play. A Teacher Guide, Student Mathematician's Journal, Hint Cards, and Think Beyond Cards are available. The unit is intended for fifth grade and takes approximately 35 50-minute sessions, or approximately 7 weeks, to complete. Hint Cards support students who need more practice or additional instruction with skills or concepts, and Think Beyond Cards challenge students	***Tiered Delivery:*** Utilize the unit's Hint Cards and Think Beyond Cards.	This unit aligns with 7th grade Data Analysis, Statistics, and Probability standards, specifically 7.DSP.5; 7.DSP.6; 7.DSP.7. It is assumed that the 3-5 Data Analysis standards	PS.1; PS.2; PS.3; PS.4; PS.5; PS.6; PS.7; PS.8

	who have demonstrated mastery and are ready for an increased challenge.		have been mastered as a prerequisite to successfully engaging in this unit.	
VandeCreek, B. (2000) ***Math Rules! 3rd-4th.*** Marion, IL: Pieces of Learning. www.piecesoflearning.com (ISBN: 978-1-880505-80-9) *Also found in:* • *Number Sense* • *Computation* • *Algebraic Thinking* • *Geometry* • *Measurement*	This reproducible resource provides a year's worth of weekly 8-problem enrichment challenge worksheets for both third and fourth grade. The variety of problems covers standards from all content strands. These worksheets are ideal for homework use.	***Tiered delivery:*** Match the grade level resource most appropriate to the readiness level of students. This resource is available for grades 1-6.	3.DA.1	PS.1; PS.2; PS.3; PS.4; PS.5; PS.6; PS.7; PS.8
VandeCreek, B. (2000) ***Math Rules! 5th-6th.*** Marion, IL: Pieces of Learning. www.piecesoflearning.com	This reproducible resource provides a year's worth of weekly 8-problem enrichment challenge worksheets for both fifth and sixth	***Tiered delivery:*** Match the grade level resource most appropriate to the readiness level of students. This resource is	4.DA.1; 4.DA.2; 4.DA.3	PS.1; PS.2; PS.3; PS.4; PS.5; PS.6; PS.7; PS.8

(ISBN: 978-1-880505-81-6) *Also found in:* • *Number Sense* • *Computation* • *Algebraic Thinking* • *Geometry* • *Measurement*	grade. The variety of problems covers standards from all content strands. These worksheets are ideal for homework use.	available for grades 1-6.	5.DS.1; 5.DS.2	